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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,320	08/16/2001	Paul Charles Downey	12000-901	3960

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EXAMINER

GLESSNER, BRIAN E

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/931,320

Applicant(s)

DOWNEY, PAUL CHARLES

Examiner

Brian E. Glessner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 14 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 447.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The following office action is in response to the amendment filed on 3/14/03. Claims 1-28 are pending in the application. Claims 1-27 are rejected and claim 28 is withdrawn from consideration as being drawn to a non-elected invention (see the restriction requirement below). The corrections to the specification, drawings and IDS have been received and are acceptable. The examiner will attach a signed copy of the Information Disclosure Statement filed with the amendment to this office action.

#### ***Election/Restrictions***

1. Newly submitted claim 28 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 28 is drawn to a method of manufacturing a substrate. The method claim is a different invention than the article claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 28 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Claim Rejections - 35 USC § 102***

1. Claims 1, 3, 6, 8, 10, 11, 13, 14, 16, and 19 stand and claims 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Mashunkashey et al. (5,714,219).

In regard to claim 1, Mashunkashey discloses a flooring system comprising a sub-floor 43, a “decorative” top layer 41 or 51, and a substrate 21 having a top surface and an oppositely facing bottom surface, the bottom surface positioned proximate the sub-floor and the top surface is positioned proximate the decorative top layer, the substrate having voids, column 4, lines 65

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and 66, i.e. porous (voids) to water, which extend between the top surface and the bottom surface, the substrate is manufactured from rubber 23 in sheets that are capable of being cut to the desired configuration, whereby it is inherent that the substrate has the strength characteristics to support the decorative layer and prevent damage thereto and the sound dampening characteristics to provide decibel reduction through the substrate, column 5, lines 5 and 6. The examiner would like to point out that since Mashunkashey discloses all of the structural features disclosed in applicant's claim, Mashunkashey's structure will inherently be capable of performing the same functions disclosed by applicant.

In regard to claims 8 and 13, Mashunkashey discloses a substrate 21 for use in a flooring system which has a sub-floor 43 and a decorative upper layer 41 or 51, the substrate comprising a continuous sheet 21 having a bottom surface, a top surface, side surfaces, and end surfaces, the top surface and the oppositely facing bottom surface are essentially parallel to each other and are spaced apart by the thickness of the substrate, voids (column 4, lines 65 and 66, i.e. porous (voids) to water) are provided in the substrate, the voids are provided between particles 23 of rubber, whereby when the substrate is positioned between the sub-floor and the decorative top layer, the particles of rubber provide the strength required to prevent deformation of the substrate in the direction of the thickness and the voids are inherently capable of contributing to the sound dampening characteristics that will provide decibel reduction across the thickness of the substrate. Mashunkashey discloses that the member 21 could be used to absorb sound, column 5, line 6.

In regard to claims 3, 10, and 16, Mashunkashey inherently discloses that the substrate has the strength characteristics required to support the decorative layer while also having

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sufficient resiliency so as to be capable of being delivered in rolls. Mashunkashey discloses at column 4, line 66 that said substrate 21 is resilient.

In regard to claims 6, 11, and 19, Mashunkashey discloses the claimed invention, wherein the substrate is made from an SBR rubber material, column 2, lines 26-28.

In regard to claim 14, Mashunkashey discloses the claimed invention, wherein the continuous sheet is cut to the appropriate length to fit the space requirements.

In regard to claims 25 and 26, Mashunkashey discloses the claimed invention except for specifically disclosing that said rubber is formed in a cylindrical member and the sheets are cut from the cylindrical member. However, this claim limitation is a process limitation. Therefore, even though process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Therefore, since the final product is a rubber sheet, the claimed limitations are met because Mashunkashey discloses the use of a rubber sheet.

***Claim Rejections - 35 USC § 103***

2. Claims 7, 12, and 20 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mashunkashey et al. (5,714,219).

In regard to claims 7, 12, and 20, Mashunkashey discloses the claimed invention except for specifically disclosing that the sound dampening characteristics exhibit a decibel reduction of approximately 20 dB for a substrate with a thickness of 5 mm. However, in the 102 sense, since Mashunkashey discloses all of the structural limitations disclosed by applicant, and since

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Mashunkashey's substrate is comprised of the same materials, it will inherently be capable of providing the same decibel reduction as applicant's substrate.

In the alternative 103 sense, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make Mashunkashey's substrate have a decibel reduction of 20 dB for a substrate of 5 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. The examiner takes the position that since the applicant's structure and Mashunkashey's structures are the same, they will obviously be capable of performing the same functions.

3. Claims 2, 9, 15, and 21-24 stand and 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mashunkashey et al. (5,714,219).

In regard to claims 2, 9, and 15, Mashunkashey discloses the claimed invention, except for specifically disclosing that the density of the substrate is less than 1000 kilograms per meter cubed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make Mashunkashey's substrate with a density of less than 1000 kilograms since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Since Mashunkashey's substrate and applicant's substrate are made of the same materials and they are being used for the same function, i.e. to support a floor layer, the examiner takes the position that it would be obvious to make both substrates of the same density.

In regard to claims 21-24, Mashunkashey discloses a substrate for use in a flooring system. Mashunkashey obviously discloses all of the claimed limitations disclosed in claims 21-

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24. Claims 21-24 are rejected on the same grounds of rejection set forth above with respect to claims 1, 2, 3, 6, 7, 12, and 20.

In regard to claim 27, Mashunkashey discloses the basic claimed invention except for specifically disclosing that said rubber is formed in a cylindrical member and the sheets are cut from the cylindrical member. However, this claim limitation is a process limitation. Therefore, even though process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Therefore, since the final product is a rubber sheet, the claimed limitations are met because Mashunkashey discloses the use of a rubber sheet.

4. Claims 4, 5, 17, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mashunkashey et al. (5,714,219) in view of Ducharme (6,213,252).

In regard to claims 4, 5, 17, and 18, Mashunkashey discloses the claimed invention except for specifically disclosing that the substrate is fixed to the sub-floor and the top layer by means of an adhesive. Ducharme teaches that it is known to fix a sound absorbing rubber substrate to a sub-floor and a top layer, column 2, lines 61 and 62, and column 4, lines 19-22. Ducharme teaches that using an adhesive to fix the substrate to the sub-floor is well known in the art. Ducharme does not specifically disclose that the substrate is secured to the top layer with an adhesive. However, it would have been obvious to one having ordinary skill in the art to use an adhesive for fixing both the top layer and the sub-floor to the substrate because, as taught by Ducharme, using adhesives in floor systems is well known in the art. Therefore, it would have

been obvious to one having ordinary skill in the art at the time the invention was made to adhesively attach Mashunkashey's substrate to his top layer and his sub-floor, because once they are adhesively attached, they will not become separated from the substrate.

***Claim Rejections - 35 USC § 103***

5. Claims 1-7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ducharme (6,213,252) in view of Mashunkashey et al. (5,714,219).

In regard to claim 1, Ducharme discloses a flooring system comprising a sub-floor 22, a "decorative" top layer 20, and a sound absorbing substrate 10 comprising a sheet having a top surface and an oppositely facing bottom surface, the bottom surface is positioned proximate the sub-floor and the top surface is positioned proximate the decorative top layer, the substrate is further comprised of particles of rubber, column 3, lines 29-31, that form a sheet which is cut to fit a desired configuration. Ducharme does not specifically disclose that his substrate has voids located between the particles of rubber that extend between the top and bottom surfaces.

Mashunkashey teaches that it is known to provide a substrate having voids, column 4, lines 65 and 66, i.e. porous (voids) to water. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute Mashunkashey's sound absorbing rubber particle sheet for Ducharme's sound absorbing rubber particle sheet, because both sheets will absorb the sound that is produce from walking on the floor. Further, since Mashunkashey's substrate has voids, it will also allow moisture to travel through the substrate and out of the floor system.

In regard to claim 2, Ducharme in view of Mashunkashey disclose the basic claimed invention, except for specifically disclosing that the density of the substrate is less than 1000



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kilograms per meter cubed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make Ducharme in view of Mashunkashey's substrate with a density of less than 1000 kilograms since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Since Ducharme in view of Mashunkashey's substrate and applicant's substrate are made of the same materials and they are being used for the same function, i.e. to support a floor layer, the examiner takes the position that it would be obvious to make both substrates of the same density.

In regard to claim 3, Ducharme in view of Mashunkashey disclose that the substrate has the strength characteristics required to support the decorative layer while also having sufficient resiliency so as to be capable of being delivered in rolls. Mashunkashey discloses at column 4, line 66 that said substrate 21 is resilient. Further, it can obviously be seen in the figures that the substrate is supporting the decorative layer, figure 2 Ducharme.

In regard to claims 4 and 5, Ducharme in view of Mashunkashey disclose the basic claimed invention, wherein the substrate is adhesively fixed to the sub-floor, and the top layer is secured to the substrate, column 2, lines 61 and 62, and column 4, lines 19-22. Ducharme states that using an adhesive to fix the substrate to the sub-floor is well known in the art. Ducharme does not specifically disclose that the substrate is secured to the top layer with an adhesive. However, it would have been obvious to one having ordinary skill in the art to use an adhesive for fixing both the top layer and the sub-floor to the substrate because, as taught by Ducharme, using adhesives to secure various layers of a floor system is well known in the art. Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to adhesively secure the top layer to the substrate.

In regard to claim 6, Ducharme in view of Mashunkashey disclose the basic claimed invention, wherein the substrate is made from an SBR rubber material, column 2, lines 26-28 of Mashunkashey. Further, the examiner would like to point out that both substrates are made of recycled tire rubber and Mashunkashey discloses that tires are often made of SBR rubber, column 2, lines 26-28.

In regard to claim 7, Ducharme in view of Mashunkashey disclose the basic claimed invention except for specifically disclosing that the sound dampening characteristics exhibit a decibel reduction of approximately 20 dB for a substrate with a thickness of 5 mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make Ducharme in view of Mashunkashey's substrate have a decibel reduction of 20 dB for a substrate of 5 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. The examiner takes the position that since the applicant's structure and Ducharme in view of Mashunkashey's structures are the same, they will obviously be capable of performing the same functions.

### ***Response to Arguments***

2. Applicant's arguments filed 3/14/03 have been fully considered but they are not persuasive.

With respect to both rejections of claim 1, the applicant argues that Mashunkashey does not teach that the member 21 is a substrate that has voids extending from a top surface to a

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bottom surface of the substrate. The examiner respectfully disagrees. Mashunkashey does disclose a substrate that has voids extending from a top surface to a bottom surface. Although this is not specifically shown, it is clear from the disclosure. Mashunkashey states at column 5, lines 3 and 4, “water will pass through the products 21 and 61”. Therefore, in order for water to pass through the member 21, it must pass from the top to the bottom of the member. Hence, if the water passes from the top of the member to the bottom of the member, there must be at least one void that extends from the top to the bottom. If the void did not extend from the top to the bottom of the member, the water would not be capable of passing through said member. In conclusion, Mashunkashey does disclose the claimed limitations of claim 1.

In regard to the arguments pertaining to claims 8 and 13, the applicant argues that Mashunkashey does not teach the positioning of voids between particles of rubber such that they contribute to the sound dampening characteristics of the substrate to provide decibel reduction. Once again, the examiner respectfully disagrees. Mashunkashey teaches that his substrate 21 is made of particles of rubber that are recycled from tires. It is well known to those having ordinary skill in the art that tires do not have voids that pass through the rubber. The rubber that makes up the tires is solid so that air cannot pass through said tire. Therefore, when the tires are cut up into pieces, the pieces will still not have any voids therein. This is known, because if the rubber for the tires had voids that passed through the thickness of the tire, the tires would not hold air. Thus, the tire would not function. Hence, since the rubber particles do not have voids therein, and Mashunkashey teaches that the substrate 21 is made up of the particles and allows water to pass there through, the water must pass through voids formed between the particles since water cannot pass through the particles themselves. Finally, in regard to the sound

dampening characteristics, since Mashunkashey's substrate contains all of the structural limitations of applicant's claims, it is inherently capable of performing the same function as applicant's substrate. Further, Mashunkashey even discloses that his substrate can be used as sound absorbent wall, column 5, line 6.

In regard to the arguments pertaining to claim 21, the applicant argues that Mashunkashey does not disclose the use of substrate having a density of less than 1000 kilograms per meter cubed, or that the voids are positioned between particles of rubber. With respect to the positioning of the voids, the same response given above with respect to claims 8 and 13 applies to claim 21. In regard to the density, the examiner stated in the rejection that Mashunkashey does not disclose the specific density of the mat. However, the examiner took the position that where the general conditions of claim are disclosed in the prior art, discovering the optimum or workable ranges is within the level of one having ordinary skill in the art. Therefore, one having ordinary skill in the art is capable of determining an appropriate density of a substrate for a given situation. Thus, since both the applicant's substrate and Mashunkashey's substrate are being use for the same purposes, one of ordinary skill would be capable of determining the best density for said purpose. Claim 21 stands rejected.

Although the applicant addressed all of the claims in the application, the applicant did not provide any additional arguments pertaining to the dependent claims. The applicant only argued the limitations of claims 1, 8, 13, and 21. The examiner believes that he has responded to all of the applicant's arguments. In conclusion, claims 1-27 are rejected and claim 28 has been withdrawn from consideration as being drawn to a non-elected invention.

The examiner would finally like to point out that claim 24 was mistakenly grouped with claims 7, 12, and 20 under the 102/103 rejection. The applicant pointed this out. The examiner has not changed the rejection of claim 24. He has merely placed it under only the 103 rejection heading. The same rejection was made in the previous office action. Therefore, no new grounds of rejection were made other than for the newly added claims 25-27.

***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Glessner whose telephone number is 703-305-0031. The examiner can normally be reached on Monday-Friday 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on 703-308-0839. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

B.G.  
May 16, 2003

A handwritten signature in cursive script, appearing to read "Brian Glessner", with a long horizontal flourish extending to the right.

**BRIAN E. GLESSNER**  
**PATENT EXAMINER**